UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/478,799	01/07/00	HAYAMA M	23.1090

021171
STAAS & HALSEY LLP
700 11TH STREET, NW
SUITE 500
WASHINGTON DC 20001

WM01/1002

EXAMINER	
ANYASO, U	
ART UNIT	**PAPER NUMBER**
2675	5

DATE MAILED: 10/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/478,799	Hayama et al
Examiner	**Art Unit**
Uchendu O. Anyaso	2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Jan 7, 2000

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-9 is/are pending in the applica

4a) Of the above, claim(s) _____ is/are withdrawn from considera

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-9 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirem

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

DETAILED ACTION

1. **Claims 1-9** are pending in this action.

Claim Rejections - 35 USC ' 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. **Claims 1-9** are rejected under 35 U.S.C. 102(b) as being anticipated by *Siddiqui* (U.S. Patent 5,912,661).

Regarding **Claim 1**, *Siddiqui* teaches a mouse (12) having a rotating wheel button (22) with a plurality of rotating bodies such as the optical encoding wheel (44), and axle (30) which had left and right bearing surfaces (36, 38) which are all mounted along the circumference of the wheel (column 3, lines 3-8, figure 2 at 12, 22, 30, 36, 38 & 44).

Furthermore, *Siddiqui* teaches an optical encoding wheel (44), light source (46), and a light detector (48) which serve as a detection means by sensing the motion of the optical encoder along the surface of the wheel (22), and providing a positioning signal (*see* Abstract; *see also* column 3, lines 43-51, figure 2 at 12, 44 & 48; column 4, 33-40, figure 7).

Regarding **Claim 2** and **7**, in addition to discussion in claim 1, *Siddiqui* teaches left and right click buttons (18, 20) with their respective left and right microswitches (54, 56) (column 4, lines 11-20, figure 7 at 18, 20, 54 & 56).

Furthermore, *Siddiqui* teaches a third switch in the form of a switch engager (50) which depresses the switch button (51) of a microswitch (52) when the wheel button (22) is depressed (column 4, lines 11-20, figure 7 at 22, & 50-52).

Also, *Siddiqui* teaches a detecting means for the third switch by teaching that microswitch (52) is mounted on a circuit board (28), along with left and right microswitches (54, 56) that are activated by left and right mouse buttons (column 4, lines 11-20, figure 7 at 28, 52, 54 & 56). This provides a detection means for detecting the operating state of the switches and also enables the mouse buttons (18, 20) to provide tactile and aural feedback to a user who depresses the wheel (22) (column 4, lines 11-20, figure 7 at 18, 20 & 22).

Regarding **Claims 3** and **4**, in addition to the discussion in claim 1 and 2, *Siddiqui* teaches/shows a ratchet construction of his invention wherein the wheel is adapted to fit in this ratchet construction (*see* figures 2 & 3).

Regarding **Claims 5** and **6**, in further discussion of claim 1, *Siddiqui* teaches/shows the cylindrical and spherical configurations of the rotating bodies (*see* figures 2 & 3 at 22, 30, 36, 38, 44, 50).

Regarding **Claim 8**, in further discussion of claim 1, *Siddiqui* teaches recess such as an oblong recess formed along the rotating bodies (column 3, lines 9-37, figure 3).

Regarding **Claim 9**, in further discussion of claim 1, *Siddiqui* teaches a mouse (12) having a rotating wheel button (22) with a plurality of rotating bodies such as the optical encoding wheel (44), and axle (30) which had left and right bearing surfaces (36, 38) which are all mounted along the circumference of the wheel (column 3, lines 3-8, figure 2 at 12, 22, 30, 36, 38 & 44).

Furthermore, *Siddiqui* teaches an optical encoding wheel, light source (46), and a light detector (48) which serve as a detection means by sensing the motion of the optical encoder which is along the surface of the wheel (22), and then providing a positioning signal (*see* Abstract; *see also* column 3, lines 43-51, figure 2 at 12, 44 & 48; column 4, 33-40, figure 7).

Siddiqui teaches left and right click buttons (18, 20) with their respective left and right microswitches (54, 56) (column 4, lines 11-20, figure 7 at 18, 20, 54 & 56). Furthermore, *Siddiqui* teaches a third switch in the form of a switch engager (50) which depresses the switch button (51) of a microswitch (52) when the wheel button (22) is depressed (column 4, lines 11-20, figure 7 at 22, & 50-52).

Also, *Siddiqui* teaches a detecting means for the third switch by teaching that microswitch (52) is mounted on a circuit board (28), along with left and right microswitches (54, 56) that are activated by left and right mouse buttons (column 4, lines 11-20, figure 7 at 28, 52, 54 & 56). This provides a detection means for detecting the operating state of the switches and

also enables the mouse buttons (18, 20) to provide tactile and aural feedback to a user who depresses the wheel (22) (column 4, lines 11-20, figure 7 at 18, 20 & 22).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,808,568 to *Wu* for a finger operated module for generating encoding signals.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Uchendu O. Anyaso** whose telephone number is **(703) 306-5934.** If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Steve Saras**, can be reached at **(703) 305-9720.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Uchendu O. Anyaso

09/29/2001

STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600